

DOCKET: CU-3383

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT: Rainer TILSE)
SERIAL NO: 10/069,949) Group Art Unit: 3732
FILED: March 7, 2002) Examiner: John J. Wilson
TITLE: METHOD AND INSTRUMENT FOR INTRODUCING A DENTAL
FILLING MATERIAL WITH A SYNTHETIC RESIN BASE INTO A
TOOTH CAVITY

THE COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, VA 22313-1450

AMENDED CLAIMS

1. (cancelled)
2. (cancelled)
3. (currently amended) Hand-held device for filling a ~~filling compound on synthetic resin basis~~ synthetic resin filling compound from a supply container (9) into a cavity of a tooth using the device comprising:
a nozzle (12) from which the filling compound is ejected injected into said cavity,
having means (4, 5, 6) for conveying the filling compound from ~~the~~ a supply container (9) to the nozzle (12),
~~and having~~ a handle portion (3), and
~~characterized in that the hand-held device comprises~~ a sound generator, especially an ultrasound generator (13) that sets the nozzle (12) into oscillation.
4. (currently amended) The hand-held device as defined in Claim 3, ~~characterized in that~~ wherein the nozzle (12) is a short small tube.
5. (currently amended) The hand-held device as defined in Claim 3 ~~or Claim 4, characterized in that~~ wherein the supply container (9) sits exchangeably in a

holder (2) and that the sound generator (13) is coupled to the holder (2) in oscillation-transmitting fashion.

6. (currently amended) The hand-held device as defined in ~~any of Claims 3 to 5, characterized in that~~ Claim 3, wherein the sound generator (13) comprises a piezoelectric oscillator.

7. (currently amended) The hand-held device as defined in ~~any of Claims 3 to 5, characterized in that~~ Claim 3, wherein the sound generator (13) comprises a magnetostrictive oscillator.

8. (currently amended) The hand-held device as defined in ~~any of Claims 3 to 5, characterized in that~~ Claim 3, wherein the sound generator comprises a pneumatically excited oscillator.

9. (currently amended) The hand-held device as defined in ~~any of Claims 3 to 8, characterized in that~~ Claim 3, wherein a common actuating element (4) is provided for the sound generator (13) and the conveying means (4, 5, 6).

10. (currently amended) The hand-held device as defined in ~~any of Claims 3 to 9, characterized in that~~ Claim 3, wherein the hand-held device is configured in the way of a spray gun.

11. (currently amended) The hand-held device as defined in ~~any of Claims 3 to 9, characterized in that~~ Claim 3, wherein the hand-held device is configured in the way of a dentist's handpiece.

12. (currently amended) The hand-held device as defined in ~~Claim 10 or Claim 11, characterized in that it~~ Claim 9, wherein said actuating element comprises a lever or a push button as ~~actuating element (4)~~.

13. (new) The hand-held device as defined in Claim 3, wherein said sound generator is an ultrasound generator.

14. (new) A method for filling a filling material comprising the steps of:
providing a synthetic resin having a viscosity which is lowered under the action of vibrations, and
injecting said synthetic resin into a cavity of a tooth while subjecting the synthetic resin to the action of sound.

15. (new) The method as defined in Claim 14, wherein the synthetic resin is injected into the cavity using a nozzle, and the nozzle is subjected to the action of sound.

16. (new) The method as defined in Claim 14, wherein the synthetic resin is subjected to ultrasound.